

JC07 Rec'd PCT/PTO 21 MAR 2002

FORM PTO-1390 (REV. 12-2001)		U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE		ATTORNEY'S DOCKET NUMBER 12707P048S	
TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A FILING UNDER 35 U.S.C. 371				U.S. APPLICATION NO. (If known, see 37 CFR 1.5 <b>10/088849</b> )	
INTERNATIONAL APPLICATION NO. PCT/EP00/09230		INTERNATIONAL FILING DATE 21 September 2000		PRIORITY DATE CLAIMED 22 September 1999	
TITLE OF INVENTION $Al_2O_3/SiC$ NANOCOMPOSITE ABRASIVE GRAINS, METHOD FOR PRODUCING THEM AND THEIR USE					
APPLICANT(S) FOR DO/EO/US Paul MOLTGEN, Pirmin WILHELM					
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:					
<p>1. <input checked="" type="checkbox"/> This is a <b>FIRST</b> submission of items concerning a filing under 35 U.S.C. 371.</p> <p>2. <input type="checkbox"/> This is a <b>SECOND</b> or <b>SUBSEQUENT</b> submission of items concerning a filing under 35 U.S.C. 371.</p> <p>3. <input type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.</p> <p>4. <input type="checkbox"/> The US has been elected by the expiration of 19 months from the priority date (Article 31).</p> <p>5. <input checked="" type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371(c)(2))</p> <p style="margin-left: 20px;">a. <input checked="" type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau).</p> <p style="margin-left: 20px;">b. <input checked="" type="checkbox"/> has been communicated by the International Bureau.</p> <p style="margin-left: 20px;">c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US).</p> <p>6. <input checked="" type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).</p> <p style="margin-left: 20px;">a. <input checked="" type="checkbox"/> is attached hereto.</p> <p style="margin-left: 20px;">b. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4).</p> <p>7. <input checked="" type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))</p> <p style="margin-left: 20px;">a. <input type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau).</p> <p style="margin-left: 20px;">b. <input checked="" type="checkbox"/> have been communicated by the International Bureau.</p> <p style="margin-left: 20px;">c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired.</p> <p style="margin-left: 20px;">d. <input type="checkbox"/> have not been made and will not be made.</p> <p>8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371 (c)(3)).</p> <p>9. <input type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).</p> <p>10. <input checked="" type="checkbox"/> An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).</p> <p>Items 11 to 20 below concern document(s) or information included:</p> <p>11. <input type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98.</p> <p>12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.</p> <p>13. <input checked="" type="checkbox"/> A <b>FIRST</b> preliminary amendment.</p> <p>14. <input type="checkbox"/> A <b>SECOND</b> or <b>SUBSEQUENT</b> preliminary amendment.</p> <p>15. <input type="checkbox"/> A substitute specification.</p> <p>16. <input type="checkbox"/> A change of power of attorney and/or address letter.</p> <p>17. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 35 U.S.C. 1.821 - 1.825.</p> <p>18. <input checked="" type="checkbox"/> A second copy of the published international application under 35 U.S.C. 154(d)(4).</p> <p>19. <input type="checkbox"/> A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).</p> <p>20. <input checked="" type="checkbox"/> Other items or information: Data Sheet</p>					

<b>10/088849</b> U.S. APPLICATION NO. (If known) (37 CFR 1.51)		INTERNATIONAL APPLICATION NO.		ATTORNEY'S DOCKET NUMBER <b>12707P04US</b>	
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21. <input checked="" type="checkbox"/> The following fees are submitted: <b>BASIC NATIONAL FEE (37 CFR 1.492 (a) (1) - (5)):</b> Neither international preliminary examination fee (37 CFR 1.482) nor international search fee (37 CFR 1.445(a)(2)) paid to USPTO and International Search Report not prepared by the EPO or JPO . . . . . \$1040.00  International preliminary examination fee (37 CFR 1.482) not paid to USPTO but International Search Report prepared by the EPO or JPO . . . . . \$890.00  International preliminary examination fee (37 CFR 1.482) not paid to USPTO but international search fee (37 CFR 1.445(a)(2)) paid to USPTO . . . . . \$740.00  International preliminary examination fee (37 CFR 1.482) paid to USPTO but all claims did not satisfy provisions of PCT Article 33(1)-(4) . . . . . \$710.00  International preliminary examination fee (37 CFR 1.482) paid to USPTO and all claims satisfied provisions of PCT Article 33(1)-(4) . . . . . \$100.00  <b>ENTER APPROPRIATE BASIC FEE AMOUNT =</b>				<b>CALCULATIONS PTO USE ONLY</b>	
				\$ 890	
Surcharge of \$130.00 for furnishing the oath or declaration later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(e)).				\$ 130	
CLAIMS	NUMBER FILED	NUMBER EXTRA	RATE	\$	
Total claims	29 - 20 =	9	x \$18.00	\$ 162	
Independent claims	3 - 3 =	0	x \$84.00	\$	
MULTIPLE DEPENDENT CLAIM(S) (if applicable) <u>yes</u>				+ \$280.00	\$ 280
<b>TOTAL OF ABOVE CALCULATIONS =</b>				<b>\$ 1,462</b>	
<input type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. The fees indicated above are reduced by 1/2.				+	
<b>SUBTOTAL =</b>				\$	
Processing fee of \$130.00 for furnishing the English translation later than <input type="checkbox"/> 20 <input type="checkbox"/> 30 months from the earliest claimed priority date (37 CFR 1.492(f)).				\$	
<b>TOTAL NATIONAL FEE =</b>				\$	
Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property +				\$	
<b>TOTAL FEES ENCLOSED =</b>				<b>\$ 1,462</b>	
				Amount to be refunded:	\$
				charged:	\$

a. ☒ A check in the amount of \$ 1,462 to cover the above fees is enclosed.

b. ☐ Please charge my Deposit Account No. \_\_\_\_\_ in the amount of \$ \_\_\_\_\_ to cover the above fees.  
 A duplicate copy of this sheet is enclosed.

c. ☒ The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any  
 overpayment to Deposit Account No. 03-2410A duplicate copy of this sheet is enclosed.

d. ☐ Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. **Credit card  
 information should not be included on this form.** Provide credit card information and authorization on PTO-2038.

**NOTE:** Where an appropriate time limit under 37 CFR 1.494 or 1.495 has not been met, a petition to revive (37 CFR  
 1.137 (a) or (b)) must be filed and granted to restore the application to pending status.

SEND ALL CORRESPONDENCE TO:

Jerry Cohen, Esq.  
 Perkins, Smith & Cohen, LLP  
 One Beacon Street  
 Boston, MA 02108  
 (617) 854-4000

SIGNATURE  
Jerry COHEN  
 NAME  
20,522  
 REGISTRATION NUMBER

10/088849

JCTO rec'd PCT/PTO 21 MAR 2002

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants: Paul MOELTGEN, Pirmin WILHELM

For:  $\text{Al}_2\text{O}_3/\text{SiC}$  NANOCOMPOSITE ABRASIVE GRAINS, METHOD FOR  
PRODUCING THEM AND THEIR USE

Our File: 12707P04US

**CERTIFICATE OF MAILING BY "EXPRESS MAIL"  
UNDER 37 C.F.R. 1.10**


"Express Mail" mailing label number: EL449598894US

Date of Deposit: March 21, 2002

Identification of paper or fee: U.S. National Phase Application under 35 U.S.C. 371 including PTO-1390, PTO-1382, check for \$1,462, Application Data Sheet, Preliminary Amendment Made Upon U.S. National Phase Entry, Appendix A, Appendix B, Certified translation of Copy of WO 01/21547 A1, copy of WO 01/1547A1 published in the German language, 3 sheets drawing, PCT/IPEA/409

I hereby certify that the above-identified paper or fee to which this certification is attached is being deposited by me with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 C.F.R. 1.10 on the date indicated above and addressed to the Honorable Assistant Commissioner of Patents, Washington, D.C. 20231.

Marian E. Jackson

  
(Signature of person mailing  
paper or fee)

PERKINS, SMITH & COHEN  
One Beacon Street  
Boston, Mass. 02108  
(617) 854-4000

# TRANSMITTAL LETTER TO THE UNITED STATES RECEIVING OFFICE

DEPOSITED

Date	21 March 2002/PTO
International Application No.	PCT/EP00/09230
Attorney Docket No.	12707P04US

2002

## I. Certification under 37 CFR 1.10 (if applicable)

EL449598894US

Express Mail mailing number

21 March 2002

Date of Deposit

I hereby certify that the application/correspondence attached hereto is being deposited with the United States Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to Assistant Commissioner for Patents, Washington, D.C. 20231.

*Marian E. Jackson*  
Signature of person mailing correspondence

Marian E. Jackson

Typed or printed name of person mailing correspondence

## II. ~~NEW~~ New International Application

TITLE AI2O3/SiC NANOCOMPOSITE ABRASIVE GRAINS, METHOD FOR PRODUCING THEM AND THEIR USE

Earliest priority date  
(Day/Month/Year)

22 September 1999

**SCREENING DISCLOSURE INFORMATION:** In order to assist in screening the accompanying international application for purposes of determining whether a license for foreign transmittal should and could be granted and for other purposes, the following information is supplied. (Note: check as many boxes as apply):

- A. ☒ The invention disclosed was **not** made in the United States.  
 B. ☒ There is no prior U.S. application relating to this invention.  
 C. ☐ The following prior U.S. application(s) contain subject matter which is related to the invention disclosed in the attached international application. (NOTE: priority to these applications may or may not be claimed on form PCT/RO/101 (Request) and this listing does not constitute a claim for priority.)

application no.		filed on	
application no.		filed on	

- D. ☐ The present international application contains additional subject matter not found in the prior U.S. application(s) identified in paragraph C. above. The additional subject matter is found on pages  and ☐ DOES NOT ALTER ☐ MIGHT BE CONSIDERED TO ALTER the general nature of the invention in a manner which would require the U.S. application to have been made available for inspection by the appropriate defense agencies under 35 U.S.C. 181 and 37 CFR 5.1. See 37 CFR 5.15

## III. ☐ A Response to an Invitation from the RO/US. The following document(s) is(are) enclosed:

- A. ☐ A Request for An Extension of Time to File a Response  
 B. ☐ A Power of Attorney (General or Regular)  
 C. ☐ Replacement pages:

pages		of the request (PCT/RO/101)	pages		of the figures
pages		of the description	pages		of the abstract
pages		of the claims			

- D. ☐ Submission of Priority Documents

Priority document		Priority document	
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- E. ☐ Fees as specified on attached Fee Calculation sheet form PCT/RO/101 annex

## IV. ☐ A Request for Rectification under PCT 91 ☐ A Petition ☐ A Sequence Listing Diskette

## V. ☒ Other (please specify):

copy of WO 01/21547 publication, Certified translation of the publication, PTO-1390, check for \$1,462, Preliminary Amendment, Appendix A, Appendix B

The person signing this form is the:

<input type="checkbox"/> Applicant	Jerry COHEN, Reg. No. 20,522
<input checked="" type="checkbox"/> Attorney/Agent (Reg. No.)	Typed name of signer
<input type="checkbox"/> Common Representative	Signature